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*Juan-Huitzi Flores***Abstract**

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Juan-Huitzi Flores: Departamento de Historia Económica e Instituciones e Instituto Figuerola, Universidad Carlos III de Madrid, C/Madrid 126, 28903 Getafe, Spain

Email: jhuitzil@clio.uc3m.es

http://www.uc3m.es/uc3m/dpto/HISEC/profesorado/Personal_Juan_Flores.html

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Information Asymmetries and Financial Intermediation during the Baring Crisis: 1880-1890¹

JUAN-HUITZI FLORES

Abstract. This paper analyses the information structure of European investors on the eve of the Baring crisis in 1890. We argue that financial intermediaries were in a privileged position by having the monopoly of information. This situation led to conflicting interests because business and proper investors' advice were not always compatible, as they are not even today. Even though spreads in secondary market prices between Argentina's long-term sovereign bonds and U.K. consols remained stable throughout the 1880s, primary market variables such as underwriting fees or total amounts of "money left on the table" in Argentina's Initial Public Offerings reflect the deteriorating macroeconomic situation of the country. In fact, this paper suggests that lessons from the Baring crisis can be transferred to contemporaneous crises.

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Juan-Huitzi Flores is Visiting Professor at Universidad Carlos III de Madrid.

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"It's like, if you have something good to say, you say it, but if you have something bad to say, just keep your mouth shut." Federico Thomsen, Chief economist ING Baring's office in Buenos Aires, 2001.

"You will readily understand that in view of the aspect of affairs in the Argentine Republic, at present or for some time past, we have received numerous enquiries from our investing clients with respect to the government, city and provincial loans of that country held by them.[...]We should be much obliged if you would favor us with any information in your power as to the present financial situation." Letter from Foster & Braithwaite, broker at the London Stock Exchange, to Baring Brothers, 1890.

Introduction

This paper analyses the information structure of international capital markets in the 1880s, with a particular application to the financial crisis of 1890, the so called "Baring crisis".² We argue that Baring was in a privileged position because it invested in acquiring information on the economic situation of Argentina, before it became publicly available, through its agent at Buenos Aires and through the use of the most modern communication availabilities of the time. Due to its long-term relationship with Argentina and to its priority for successful underwriting, only selected information reached investors even though the deteriorating economic position of the country could be publicly followed.

The existence of information asymmetries in international financial markets has become a main issue in contemporary debate. In the economic literature, these asymmetries influence investors' behaviour which in turn affects the yields of bonds handled in secondary markets, investors' portfolio composition and countries' borrowing costs. In periods of crisis, they may also be at the origin of more severe

² On this crisis see Carlos Marichal, *A century of debt crises* (Princeton, 1989), John Harold Clapham, *The Bank of England: A history* (Cambridge, 1945), or Gerardo Della Paolera and Alan Taylor, *Straining with the Anchor* (Chicago, 2001).

problems such as sudden stops, which take place when it becomes rational for non informed investors to get out their money from a specific country or group of countries, as they imperfectly extract signals from the transactions of informed investors.³ 19th century financial markets can be characterized as a world of scarce information if we compare them with the 21st financial architecture, as those markets were mainly composed of non informed investors which relied heavily on those agents who were supposed to be “the informed”: financial intermediaries. This paper carefully analyzes the paths of information flows as they travelled from borrowing countries to final investors. An investment bank, Baring Brothers, was the most active financial intermediary of Argentina, thereby having access to privileged information which it transmitted to the financial markets in Europe. In other words, some of its main activities were to place Argentina’s debt in London and to act as the “financial press” of investors as it released the latest economic and political news from Argentina. Conflicting interests arose as it lost market share from competing financial intermediaries while it tried to keep a sustained demand for Argentina’s bonds as it underwrote a considerable amount of loans even some months before the outbreak of the crisis.⁴

We argue that asymmetries of information dominated in the 1880s and this had important consequences we need to consider if we want to properly understand the Baring crisis. Starting in Argentina, this emerging market crisis put the British banking system to the test and importantly reverberated in other countries in a probable case of contagion.⁵ Baring, one of the most reputable investment banks in

³ See for instance, the model developed by Guillermo A. “Contagion in Emerging Markets: When Wall Street is a Carrier”, mimeo, University of Maryland, 1999.

⁴ This argument can be found in Flores Juan-Huitzi, “Lending Booms, Underwriting and Competition: The Baring crisis revisited”, *Working Papers in Economic History*, 2007-01 (2007).

⁵ Among others, see Gail D. Triner and Kirsten Wandschneider, “The Baring crisis and the Brazilian Encilhamento, 1889 1891: an early example of contagion among emerging capital

Great Britain, underwrote and failed to place the Buenos Aires Water Supply Company bonds in London during 1890, causing its collapse and requiring the intervention of the Bank of England and other European central bankers in order to avoid the risk of a banking run in England. We provide a “who knew what” analysis before the crisis similar to Edwards’ study of the Mexican crisis,⁶ or more generally in the IMF (2004) report on Argentina’s troubles in 2001.⁷ Previous literature focuses on the macroeconomic aspect of the crisis leaving some important questions aside.⁸ If economic troubles arose in Argentina some years before the crisis, as standard literature points out, why did Argentina continue to receive massive capital flows until some months before the crisis? Why didn’t the yields from long term sovereign bonds of Argentina show any volatility? Why didn’t Lombard Street, then the centre of the global capital markets, sound the alarm?

This paper is divided into six sections. In section I we make a brief review of the literature on the link between information structure and financial crises. Section II presents a description of the general context of capital exports to Argentina and its relationship with investors’ information. We will present the role of financial intermediaries in guiding the markets in order to identify the best prospects for their investments. In section III we provide a brief panorama on the state of technology in the late 19th century and demonstrate that technological lags allowed banks to obtain accurate information more rapidly. In section IV we present the information

markets”, *Financial History Review*, Cambridge University Press, vol. 12, No. 2 (2005), pp 199-225; also Nathan Sussman et al. “Emerging Market spreads: Then versus Now”, *Quarterly Journal of Economics*, Vol. 117, No.2, (2002), pp. 695-733.

⁶ Sebastian Edwards, “The Mexican Peso Crisis: How Much Did We Know? When Did We Know It?”, *NBER Working Paper Series*, No. 6334 (1997).

⁷ IMF, Report on the Evaluation of the Role of the IMF in Argentina, 1991-2001, *IEO Publications* (2004).

⁸ Flores, *Lending Booms*, p. 5.

available to individual investors and contrast it with the information available to financial intermediaries, thereby demonstrating their main role as information providers. Section V shows how these information asymmetries affected costs, as borrowing costs did increase for the last part of the 1880s, although banks were those who benefited from them. Section VI presents a conclusion.

I. Information Asymmetries and Financial Crises

The main reasons for the existence of financial intermediaries are information asymmetries.⁹ From a theoretical perspective, several works focus on how to minimize problems related with this fact and how to design an optimal structure of capital markets, both at national and international levels. The latter is closely related with the international financial liberalization of the 1990s, which has proved that our financial architecture must be aware of the same kind of problems as crises spread internationally to countries with apparently strong economic fundamentals. This means that the same national issues such as monitoring, regulation, or lender of last resort have been extrapolated to international standards.¹⁰ There is nothing new in our saying that investment banks, credit agencies, and international economic organizations such as the IMF display an important role channelling funds internationally. Nor is it new to state that our international financial architecture remains fragile as international mobility, volume and volatility of capital flows continue to increase.

⁹ This is a main argument in Diamond W. Douglas, "Financial Intermediation and Delegated Monitoring", *Review of Economic Studies*, Vol. 62 (1984), pp.393-414.

¹⁰ On this and related issues see Barry Eichengreen, *Capital Flows and Crises*, (Cambridge, 2003).

It is therefore no surprise that it has been widely recognized that information asymmetries are highly correlated with financial crises, again at both levels. The classical work of Mishkin assesses this problem by reviewing potential problems related with information asymmetries: adverse selection and moral hazard.¹¹ The former refers to borrowers having an information advantage over lenders causing the “lemons” problem, meaning that lenders cannot distinguish if a borrower is a good or bad risk. Thus, they charge a higher interest rate that reflects the average quality of good and bad borrowers, thereby causing good borrowers to drop out of the market.¹² The latter refers to problems related to the agent having the incentive to deviate its behaviour from what has been previously agreed with the principal, causing lending reduction and decreasing investment.

In this paper we focus on information asymmetries at an international level, somehow trying to open the black box of markets functioning by identifying who were the informed and uninformed agents and exploring their relationship. In recent years, public debate began to turn towards the particular position of financial intermediaries in the modern financial architecture, emphasizing on the conflicting interests that these agents face when deciding on the best destinies for international capital flows, as their business is both the placement of bonds in the main financial centres and the recommendations to investors on where to put their money. This in turn has led the efforts of international policy makers and international institutions leaders in bailing-in the private sector in order to give them incentives to gather their own information on where to invest, as speculation and mimetic behaviour

¹¹ Frederic Mishkin, “Asymmetric Information and Financial Crises: A Historical Perspective”, *NBER Working Paper Series*, No. 3400 (1990).

¹² This is shown in the classical work of George A. Akerlof, “The Market for Lemons: Quality uncertainty and the Market Mechanism”, *Quarterly Journal of Economics*, Vol. 84, No.3 (1970), pp. 488-500.

attenuate crises of an individual country. Latin America's recent "Who Lost Argentina?" question clearly identified a main suspect, the same agents who invented the Argentinean miracle during the second half of the 1990s and who earned increasing amounts in underwriting fees from Argentina's bond issues even some months before the crisis¹³. For instance, Nieto and Santiso show that from all the bond recommendations made by investment banks between 1997 and 2006, in 90% of the cases underwriters positively recommend the bonds when they act as lead managers, a result which particularly applies for big emerging countries.¹⁴ Recommendations, following these authors, are more important than macroeconomic variables in predicting portfolio capital flows.

II. Financial Intermediation and the Baring crisis

Argentina was the favourite destination of European investors' capitals during the 1880s. This appears to have been the consequence of general optimism about a promising future. Economic growth had been impressive since the last crisis in 1876, thereby attracting an increasing number of European immigrants.¹⁵ Exports were booming, as profitability in agriculture increased from new colonized lands, encouraging railway construction and urban development. Even though Argentina had had debt problems since the very independence of the country, it successfully managed to survive the World crisis of the 1870s, becoming one of the few Latin American countries having avoided default. This fact made international capital

¹³ Intervention of Paul Blustein at the Conference "Who Lost Argentina? Lessons for Avoiding Future Financial Meltdowns", *Centre for Global Development*, March 18, 2005.

¹⁴ Sebastian Nieto and Javier Santiso, The Usual Suspects: A Premier on Investment Bank Recommendations and Emerging Markets, *OECD Development Centre Working Papers*, No.258 (2007).

¹⁵ Some figures on Argentina's late 19th century economic growth can be found in: Ana Maria Cerro, "La Conducta Cíclica de la Economía Argentina y el Comportamiento del Dinero en el Ciclo Económico. Argentina 1820-1998", mimeo, Universidad Nacional de Tucumán, 2000; Roberto Cortes Conde, *El Progreso Argentino 1880-1994* (Buenos Aires, 1979); Gerardo Della Parlera, "How the Argentine Economy Performed During the International Gold-Standard: a Re-examination", unpubl. PhD diss., University of Chicago, 1988.

markets reconsider their perspective on the country since early 1880s, as Argentina continued to punctually service its debt, thus achieving a stable macroeconomic environment, controlling public expenditure, channelling internal and external funds to infrastructure construction and joining the gold standard in 1882.

However, by the middle of the decade a short-term currency crisis (which made the paper peso fluctuate in the exchange markets, thus abandoning the gold standard) marked the beginning of the debacle. The second half of the decade was in fact characterized by a deteriorating macroeconomic and financial situation as shown, for instance, by Ford (1971), Cortes Conde (1989), Della Paolera (1994) and Della Paolera and Taylor (2001).¹⁶ We have summarized some main indicators in Table 1. Surprisingly, in an apparently contradictory manner, capitals continued to flow to the country reaching a peak in 1888, two years before the crisis.¹⁷ They only froze when trouble in Argentina became only too obvious: political unrest and economic distress including partial default in the first half of 1890¹⁸.

As we show in section IV, the crisis had long been expected by markets. Yet yield premia failed to reflect this. In fact, an interesting feature of the financial situation during those years were the surprisingly stable yields of Argentina's long term sovereign bonds in London (Figure 1). Taking into account that Argentina's public debt was mostly denominated in hard currency, and that a strong depreciation took

¹⁶ Alec George Ford, British investment in Argentina and Lond Swings. *Journal of Economic History*, Vol. 31, No.3 (1971), pp. 650-63; Roberto Cortes Conde, *Dinero, Deuda y Crisis: Evolución Fiscal y Monetaria en Argentina, 1862-1890* (Buenos Aires, 1989); Gerardo Della Parlera, "Monetary Experiments in Argentina, 1861-1930, *Universidad Torcuato di Tella Working Paper*, No.11 (1994).

¹⁷ No other Latin American country reached those levels of capital inflows during the 19th century. These figures are from Irving Stone, *The Global Capital Export from Great Britain, 1865-1914* (New York, 1999), pp. 32-481.

¹⁸ On a historical review on Argentina's political situation see Cortes Conde and Gallo, *La República Conservadora*, (Buenos Aires, 1986). In March 1890, the National Bank of Argentina announced the suspension of dividend payments.

place already in 1888, two years before the crisis, this feature becomes more puzzling. Spreads on U.K. consols rapidly increased in the second half of 1890, suggesting a sudden change of risk perception by investors. This fact suggests that there may be other variables to be taken into account, which may also be related to the international impact of the crisis.

Besides, we have to look at previous works made by historians to understand how the Baring crisis spread internationally. In particular, Ferns' analysis (1960) of British investors' information on emerging markets constitutes a good starting point for our own work.¹⁹ The first assumptions to be taken into account are precisely the differences in information levels between two agents in the markets and their relationship: financial intermediaries and individual investors, the latter clearly depending on the former in the practice. A main implication of this state of affairs is the monopoly of financial intermediaries on deciding where the funds were to be invested, sometimes in a not uninterested manner.

Ferns emphasizes the low level of information of individual investors. According to this author, investors not only did not know, but they did not have the means to know how the money would be used. His evidence involves letters from the press and from the Committees formed to defend the interests of the bondholders. Some investors confused Argentina with Brazil and even with Mexico. The distinction between the province of Buenos Aires and the Argentine Republic was too subtle for them. In this context, any investor willing to increase the revenues from his capital could base his decision on his own experience, investing on any asset which

¹⁹ Henri Stanley Ferns, *Britain and Argentina in the Nineteenth Century* (Oxford, 1960).

proved to be good for him. Following Fenns, financial intermediaries had a key role in recommending (or even signalling through underwriting activities). The name of Baring Brothers, Murrieta and other big banking houses meant much more to investors than abstract countries. The decision of banks to enter into Argentina's market was a confidence certificate and a substitute for knowledge, initiative and enterprise.

III. Technology and Information Flows between Europe and South America

Economists may regard 19th century financial crises as remote and radically primitive for the highly sophisticated 21st century financial architecture. Although recent studies show that economic debates may not differ in many aspects,²⁰ the first contrasting element is the state of technology. In fact, financial international markets in the late 19th century were very much integrated, with stock market prices converging between European and American markets such as London and New York.²¹ Even though to our knowledge there exist no such studies for South America and Europe, we computed our own calculations for the same bond quoted in London and Buenos Aires. Average absolute differences were decreasing in the 1870s, since the telegraph was introduced in those years.²² By 1900, a telegraphic message from Paris to Rio de Janeiro took less than 11 minutes to arrive.²³

²⁰ Comparisons on both periods can be found in Marc Flandreau and Frédéric Zumer, *The making of Global Finance* (Paris, 2004); and Barry Eichengreen et al., "Is Globalization Today Really Different Than Globalization a Hundred Years Ago?" *NBER Working Paper Series*, No.7195 (1999).

²¹ Kenneth D. Garbade and William L. Silber, "Technology, Communication and the Performance of Financial markets: 1840-1975", *Journal of Finance*, Vol. 33, No.3 (1978), pp.819-32.

²² We have looked at differences in prices in London and Buenos Aires for the Hard Dollar Loan of 1863 between January 1872 and June 1876, found that the mean differences are reduced from 0,91 to 0,88%, and computed a z test which resulted statistically significant.

²³ Pedro Carlos da Silva Telles, *Historia do Engenharia do Brasil: séculos XVI e XIX* (Rio de Janeiro, 1984).

Despite rapid technological improvements, however, technology remains a main issue when analyzing the information structure of 19th century investors. It acted sometimes as a main impediment for rapid information flows, but in all, media developed quite rapidly and a “communication revolution” took place driven by several factors, two of them vital for the transatlantic economy. First, the emergence of the steamship for long distance travelling. Second, the installation of the underseas telegraph. Most of existing studies on the impact of communication improvements in financial performance have focused on communications between Europe and North America, leaving aside a not less interesting case of communications with South America.

The need for rapid and reliable information was the clue in the determination of British supremacy in commercial and financial affairs in that part of the continent.²⁴ As a result, the early use of steamships to connect both continents allowed for rapid and accurate information on South America’s markets and economic situation. Although regular sail ships connected England with South America since 1808, steamships began a regular mail service in 1851, reducing the time necessary to cross the Atlantic several days. Graham (1956) argues that the introduction of the compound engine displaced the sail ships even for merchandise transportation.²⁵ Regarding financial markets, steamships acted as the main link for European investors to get most information during the 1880s. As we show below, this kind of communication system had many advantages over the faster but costly and imprecise telegraph.

²⁴ Robert G. Albion, “Capital Movement and Transportation: British Shipping and Latin America, 1806-1914”, *Journal of Economic History*, Vol.11, No.4 (1951), pp. 361-374.

²⁵ Gerald S. Graham, “The Ascendancy of the Sailing Ship 1850-1885”, *Economic History Review*, Vol. 9, No. 1 (1956), pp. 74-88.

In order to know the extent of communication improvements we should give some illustrative data. The economic journal “The Economist” presented a complete section of world exchange rates “on London”. Figure 2 shows the time lag between the date of the exchange rates reported and the date of publication of the journal. We can appreciate that by 1870, the exchange rates of some South American reported countries were published with a one month lag. At the end of that decade, as the telegraph was increasingly used by the press, this data was published only two days later. At the beginning of this period, these lags were strongly correlated with the time necessary for steamships to cross the Atlantic. Indeed, this information was also provided by The Economist in the subsequent section, where the information on the arrival of steamships in England from abroad was reported. This means that, for instance, in 1870 the fastest route from Buenos Aires to London passed through Montevideo, Rio de Janeiro and Lisbon, and it took ships 27 days, precisely the lag required to publish information on exchange rates. As these required times shortened, the use of telegraphic messages increased, though at high costs. The literature provides enough evidence to show that the prices of telegraphic messages were very high for average standards (Calvo 2001; Lew and Coter, 2006). This is the main reason why we infer that only important events were covered via telegraph. This fact also had an important impact on reported exchange rates, as only the information for which a considerable demand existed was published. We know that in 1870 only the New York exchange rate was reported (and published the day after) from the American continent; by 1880 also that of Rio de Janeiro; by the end of the 1880s, as British investors were very much concerned with Argentina’s Mortgage banks’ bonds, *cedulas* denominated in paper pesos, the

prime on gold was also reported (and also published the day after), while the exchange rate peso-sterling pound continued to be published with a one month lag. Other exchange rates also continued to be published only through information which arrived by steamships, with their respective lags²⁶.

In general terms however, the telegraph substituted, to some extent, for the advantages of steamboats as a means of rapid information. Transatlantic communications experienced an important technological change with the advent of the submarine telegraph in 1858, which was available to the public as a reliable means of communication only in 1866. This meant that news on any important political event arrived in the other continent with a considerable lag before the second half of the 1860s. An illustrative case was the news from the French Invasion to Mexico (1862-1867), which arrived in Paris five weeks later. In comparison, when the American Civil War took place between 1861 and 1865, news required only twelve days to cross the ocean²⁷ since the underseas telegraph connecting Europe with North America began to be used.

Previous works (Wilke, 2002, Field, 2001) state that the electric telegraph marked the beginning of the first globalization and have emphasized the impact of the telegraph on the working of financial markets and the press (Field, 1992).²⁸ Communications between Europe and South America through the telegraph began

²⁶ Although we do not know the exact causes of this fact, we may speculate on the high costs of telegraphic messages.

²⁷ Michel Mathien and Catherine Conso, *Les agences de Presse Internationales* (Paris, 1997).

²⁸ The Magnetic Telegraph, Price and Quantity Data, and the New Management of Capital, *Journal of Economic History*, Vol. 52, No.2 (1992), pp.402-13; Alexander James Field, "The Regulatory History of a New Technology: Electromagnetic Telegraphy", *Second Telecommunication Policy and Law Symposium*, 2001; Jürgen Wilke, *Gründzuge der Medien- und Kommunikationsgeschichte* (Köln, 2000).

in 1873. They could flow via the North American transatlantic cable and then all the way towards the South, or through a transatlantic cable, which directly arrived first in Brazil and later also in Argentina. The growth rate of this kind of communication was so fast that by 1878, an individual wanting to send a telegraphic message to South America had several choices of routes and prices. However, two handicaps remained in the 1880s. First, as we have shown, the telegraph was expensive. Figure 3 shows some tariffs for messages between France and South America in the late 1870s. Two facts can be highlighted from the figure. On the one hand, tariffs varied according to the chosen route and the fastest service was highly correlated with the price. On the other, the enormous cost within South America in comparison with the absolute cost of the transatlantic cable.

The second handicap was that the telegraph remained very imperfect until the end of the 19th century. Complete economic reports from South America had thus to wait some days after the rapid but limited information arrived by telegraph. In fact, when comparing market integration between the present and the years previous to WWI, Eichengreen et al. (1999) observe that information barriers limited market integration in that period. Part of this conclusion is due to technological constraints. After recognizing that important technological advances took place, they argue that communication shortcomings obstructed mainly short term capital inflows, as monitoring was affected and investment opportunities were reduced. Focusing on sovereign debt, this constraint was particularly important. As a result, the underwriting sector was developed by family groups of merchant banks, which gave them an important role in defining the destination of British capital exports, acting also as delegated monitors.

However, financial intermediaries were not exempt for this problem though it affected them to a lesser extent. A careful examination of Barings' archives throughout the 1870s and 1880s demonstrates that the telegraph (linking London with South America) was still very far from 20th century communications reliability. In some cases, telegraphic messages arrived with a stamp from the telegraph company indicating a "*Delayed Transmission through interruption on lines between...*"²⁹ (Bahia and Rio, for instance).

The main point here is the fact that financial intermediaries were those who were less affected by telegraph imperfections and that they were almost the only agents who could afford constant and rapid communication with South America. Besides, in the next section we show that banks operated through local financial houses or through their own agents (in the case of Baring, for instance). In other words, financial intermediaries already obtained an information advantage from the state of technology.

IV. Information availability to investors and financial intermediaries

Investors

We now turn to the question of "who knew what" before the Baring crisis. As we mentioned before, differentiation of each agent is a crucial aspect when analyzing markets' behaviour. In this section we will present the main sources through which an ordinary investor in Europe could get information from Argentina, adapting Flandreau's general survey (2004). These sources are the reports of the Council of

²⁹ Some of these telegraphs can be found in ING Baring Archives, Box 4.1.65.

Foreign Bondholders, Mulhall Statistics, local representatives' reports, the Statesman Yearbook, Fenn on the Funds, the Official documents and the Press. We explain each one in detail.

Individual investors had multiple sources from which they could get a bulk of information on the economic situation of Argentina. The general feature, as we describe it, is that almost every available source pointed towards a pessimistic view on Argentina. Consider first the reports of the council of foreign bondholders, which was the British Association created to protect the interests of individual investors³⁰. Regarding Argentina, the Council collected an important amount of material classified on a yearly basis and included mainly press articles with comments about budgets, economic performance and political and economic events, giving some details about the finance and public borrowing of the country. It exhaustively contained every article published in the Financial Press, either in England or extracted from the local press (in Argentina) and written in English such as , for instance, the well-known *Buenos Aires Standard*.

We have looked at each report in the 1880s.³¹ In general terms, a main feature is that they focused, as we could expect, on countries with which the CFB had some dispute³². Even though Argentina was supposed to be a case of successful and well

³⁰ Introductory note about the documents available from the Council of Foreign Bondholders, Guildhall Library, London. Since 1868, it began systematically to collect printed material, mainly press clips, brochures, and prospectus, government reports, messages and speeches in the countries where the council had special interests, aiming at providing its members with the basic information for negotiations with the borrowers, particularly when problems arose, and at having background material for the reports published in the Annual reports of the council.

³¹ It was common practice to prepare them in the annual meetings of the council, two months after the end of the year at the council house N.17, Moorgate Street at London.

³² This was not the case after 1890, when the economic situation of each country was followed more closely, in a kind of "crises early warning system". We deduce that the Baring crisis acted as a "waking up" effect for information availability. See Flandreu and Zumer (2004).

behaved country (its last default had taken place in 1876), it appeared in the reports already in 1883, when the government decided to redeem the 9% Treasury Bonds (also called “hard dollars”, because coupons were paid in gold pesos- the hard currency of Argentina) at par by drawing instead of doing it by market purchase (the bonds were quoted at discount). Both, the reports in 1883 and 1884 exposed some macroeconomic information, such as the balance of the current account, the state of public finance and the country’s borrowings³³. The sources of information quoted were the reports of the “Secretary of the British Legation at Buenos Aires, on the Trade and the Finances of the Argentine Republic” for the year 1882, as well as the presidential messages of that year. Although they emphasized on the increase in trade and public revenues (and thus, more importantly, tariff revenues) the publication already expressed concerns on the similar increase in expenses.

The 1885 Report also summarized the dispute on the hard dollars and regretted the lack of a prompt solution. In fact, the most detailed analysis of the economic situation of Argentina in those years was made in 1886. A description of the short-term 1885 crisis can be found, with a special emphasis on the increase of the gold premium and the additional issue of Argentine bank notes (as mentioned above, most of Argentina’s debt was denominated in hard currency – mainly sterling pounds). Besides, the report expressed serious concerns on increasing borrowing in the last years when, following the Reports, consolidated debt multiplied three times between 1881 and 1884. Interestingly enough, the analysis concluded that the situation could only be sustained as long as the revenues continued to increase, and

³³ Implicitly, the issue handled by the council was to know if Argentina was able to fully repay its debt or if it was a question of willingness.

it kept being reliable as investors expected deficits to be reduced by lowering expenses.

Argentina suddenly disappeared from the reports between 1886 and 1888, and reappeared in 1889. The conflict of the hard dollars had been solved by a conversion with new bonds payable 3 ½% in gold. However, in February 1889 Argentina's government began to pay the coupons in paper pesos (and thus, incurring in technical default more than one year before the crisis). The report presented some data on Argentina's economic situation without making any particular observation or comment. This did not mean, however, that the country was sinless.

Another important source was the Mulhall statistics. The Mulhall brothers were Irish sheep farmers who emigrated to Argentina in the 1850s. After some years, they changed their activities and became journalists founding "The Standard" of Buenos Aires in 1861. This journal constituted one of the most important references in the history of the Anglo-Saxon communities living in Argentina. George Michael, statistician in his country, began to work on a series of publications called "The Handbooks of the River Plate" with some statistics and data about the country. He also wrote some books like "The English in South America" and "Dictionary of Statistics" which became important sources of information for investors in Argentina.

Between 1885 and 1890, Mulhall published interesting data and general information about Argentina. Almost all of the economic data that he gathered highlighted the impressive economic growth of Argentina in the last 50 years. In

fact, by 1888 Argentina was considered as rich as many European countries and much richer than countries such as Austria or Portugal³⁴. Within all this optimism, however, Mulhall reported bad news by the late 1880s and the beginnings of the 1890s. For instance, during the first months of 1890, Mulhall presented some statistics which became public through the financial press in London. They suggested that even if wealth had considerably augmented in the period from 1884 to 1889 (calculated by Mulhall in £75 millions), total indebtedness had increased to £115 millions. As a result, the increase in wealth was partly fictitious, as concluded by the press. In fact, a rapid view at the press shows that the message extracted from those figures was one of extreme caution about the economic situation of Argentina.

A third source of information were local representatives. On the one hand, in England, the General Council of the Argentine Republic was in charge of making public official messages and reports coming from its government. Besides, an office called “South American Exchange and Information Office” was established in Paris, London, Berlin, Vienna, Berne and New York since 1887. The agents who worked for these offices intended to provide information to any interested person like, for instance, potential emigrants. They were also in charge of inserting articles in the local press in order to show the advantages to settlers in Argentina, to clarify or rectify any false information about the country and to present reports on the general situation of the country. They also represented the national banks and railway companies, and promoted trade opportunities between Europe and Argentina. Nonetheless, the tasks of these offices had given disappointing results and besides, their budget was very limited.

³⁴ Mulhall defines its measure of wealth as the addition of the value of the assets of the country: farms, railways, buildings, furniture, merchandise, bullion, sundries. Michael Georges Mulhall, *Dictionary of Statistics* (London, 1886).

On the other hand, the reports of the British representatives at Buenos Aires (Consul's reports) also provided useful information on the general political, social and economic situation of Argentina. By the end of the 1880s, these reports were concerned mainly with the premium on gold and with the increase in the country's debt. In general terms, the reports provided data on immigration, trade, and remarked the general feeling of prosperity which reigned in the country. But they also pointed out the weaknesses of financial issues such as the fiscal position of the government, considering the situation as a "crisis" already in 1889, and criticized the monetary management of the country, defining it as opposite to the one expected by the markets in Europe, as it increased the paper money issues and thus contributed to the depreciation of the paper peso. Besides, the creation of new companies and the excessive issues of *cedulas* (bonds issued by Argentina's mortgage banks) stimulated a speculative climate both in Argentina and in foreign markets.

It may be worthy to give a final note on the occasional lack of transparency present in these reports. In fact, their existence did not mean that all the information gathered was communicated to investors. For instance, Fenn wrote that in 1891, the time when banks and Argentina's government were trying to find a solution for the defaulted debts of the provinces, the British *chargé d'affaires* in Buenos Aires privately informed a colleague in the Foreign Office that the revenue of the provincial governments "*does not come up to the service required for the public debt*", and *he believed the situation so serious that it did not bear public discussion*"³⁵

³⁵Charles Fenn, *Fenn on the Funds* (London, 1887), p.442.

More ambiguous was the Statesman yearbook³⁶, even though investors expected it to be a reliable source of information about Argentina in the late 1880s. As shown by this confusing quotation from the Buenos Aires Standard:

*“Just now it is a question whether any human being has the remotest notion what the Argentine Republic owes in the aggregate, and how it compares with the resources on which it is supposed to be a lien; but the last issue of the Statesman’s yearbook affords some clue to the imposing total...”*³⁷

The figures that appeared for Argentina in the 1880s were quite interesting. Even when the ratios debt service / total revenues were considerably high for the last years of the decade (33% yearly average), the data on the deficits showed a different image. From 1886 to 1890, all the fiscal exercises presented surpluses. However, investors were aware of the shortcomings of these data. In fact, no distinction is made between budgets (presented in the publications for the years 1886, 1888 and 1889) and the ordinary revenues and expenses (extraordinary expenses were thus excluded), although each publication warned on this fact.

Maybe the most defining source of the time to make clear Argentina’s economic situation was *Fenn on the Funds*. The commonly known “trade test” used in this publication, reference for British investors during the late 19th century, has already been described by Flandreau and Zumer (2004). It evolved as a means to

³⁶ This British publication began to appear in the 1860s. Following Flandreau (2004), this was a major source of information about the macroeconomic, political and institutional situation of different countries. It was published on an annual basis.

³⁷ *The Buenos Aires Standard*, 1st September 1887.

summarize, in one single figure, the most important economic variables regarding the economic health of any given country. The publication of 1889 provided a good explanation of this evolution and was a kind of prototype of what was to become the modern country risk analysis. First, it explained that a country's debt was an important variable to consider as well as its trajectory in time. It made a distinction between debts incurred by countries for productive purposes and others (like those for war, which were much more risky). It also rejected the "population test" which, at the time, made Honduras (in default at that period) appear as a more solvent country (with £16 debt per capita) than England (£19) or Australia (£37). The publication presented new calculations on a ratio that took into account the wealth of the country – in a context where no GDP figures were available - and the interest rates of its debts.

The indicator in Fenn's Compendium removed from the interests payments the revenues from the investments made with the resources of the loans. This amount was capitalized at a rate of 5% and divided by the population (i.e., it was a per capita indicator). It also measured the exports per capita in order to have a wealth indicator, even if the publication recognized that this measure was far from being perfect as a "proxy" calculation of the wealth of a country. We looked at the resulting indicators for several countries in 1889. Argentina's indicator is 5,35. This ratio debt/exports is higher than that of "well behaved" countries (Belgium: 0,25; Sweden: 0,23, see Flandreau and Zumer, 2004) but lower than that of the problematic countries of the period (Greece, 8.49; Portugal: 13,81). In Latin America this ratio is also higher than that of average comparable countries, such as Brazil (4,63) or Chile (1,12). Besides, Fenn's Compendium gave a threshold of 4 to

classify the countries which may have had indebtment problems. Argentina was clearly on the wrong side of the test.

Investors had also access to official sources. The messages of Argentina's successive presidents, the reports of the Ministry of Finance and the Statistics Yearbook had a particular importance for investors and were publicly available through the press and Official Representations of the country in Europe as already described. Consequently, the press considered each document or statement from important politicians, officials or policy maker in detail, and presented new policy programs or objectives and policy orientations of new Governments.

We would like to point out the "timing" of these publications before being available to an ordinary European investor. For instance, the *Memorias de Hacienda* were not available before May or June of the next year (sometimes even later). This was also the case of the Statistical Yearbook and the Yearbook of the Chamber of the Buenos Aires Stock Exchange. This means that for a 21st century researcher, the main source of information in order to study the public finances of 19th century Argentina may be the *Memorias*. For a contemporary investor, however, these could be available too late for doing precise analyses on the state of Argentina's finances.

The last and most widely used source was probably the press.³⁸ Some of the pioneering users of the telegraph were precisely journalists, particularly those who had to cover financial news. A typical case is that of the Reuters agency, which

³⁸ On the history of press agencies see among others Pierre Frédérix, *Un siècle de chasse aux nouvelles de l'Agence d'information Havas à l'Agence France Presse 1835-1957* (Paris, 1959); Graham Storey, *Reuters, the story of a century of news-gathering* (New York, 1951).

began its operations in the first half of the 19th century. Already by 1851, it opened a telegraphic bureau at the London Stock Exchange, specialized in economic and financial information, competing with the postal services of the Rothschild bank. Reuters established itself a telegraph company in 1865, covering news from England and from other European countries. When the transatlantic cable opened in 1866, Reuters exchanged information with a New York based press agency, the first telegraphic messages containing news from Wall Street.

In the late 19th century, the structure of press markets was a cartel of European press agencies. The participants adopted a cooperation strategy, aiming at reducing the costs of international news transmission. This cartel was formed in the years 1866 and 1867 by an agreement between the French agency Havas and the Reuters agency called the Joint Pursue Agreement. This document engaged both parts in a common exploration of the news everywhere in the world and in the establishment of submarine cables. Later, the German agency Bernhard Wolff also signed the agreement (1870). This stipulated that the covering of South America's news should stay open to competition. Some years later, in 1874, Reuters and Havas signed an additional agreement with the *Agencia Telegraphica* from Brazil to exchange information. As soon as the transatlantic telegraph became operational in 1874, the information began to circulate between those agencies and had an enormous impact on the press. An illustrative example is that on August 1 that year, the news in the *Journal do Commercio* coming from London were dated July 30, 1874. Continuous improvements followed and a year later, Havas and Reuters sent a common correspondent to Rio who was in charge of sending information from every country

in the southern part of the continent. Reuters established his own correspondent in Chile some months later.

Besides this cartel of news agencies, The Times was the only journal to have its own agent in South America. However, how the press worked was, to some extent, a different issue as each journal dealt with news about different matters and specialized in different subjects. An interesting study on the sources of information of British investors (Grieser, 1940) distinguishes the “Lay press” with some financial articles and the pure financial press.³⁹ In general terms, the press focused only on the description of events and did not express any kind of opinion. This trend changed during the 19th century, when journals increasingly began providing comments on specific subjects. Although objectivity was appreciated, Grieser argues that this was not always the case.

A broad view of the financial press in the late 1880s shows that, in a rather counterintuitive manner (recalling stable Argentina’s long term sovereign bond yields), the general mood of the British press towards Argentina was rather pessimistic. Since 1888, the press openly wrote about a “crisis”, and increasingly published reports on the depreciation of the peso, the excessive borrowing and the persistent deficits. During the first months of 1890 (Barings’ debacle took place in November), the press already warned about a “bad end” for Argentina.

The press in other European countries concentrated on Argentina’s loans quoted in their financial markets. This meant that, for instance, the French press presented

³⁹ Norman Grieser, “The British Investor and his sources of information”, unpubl. PhD diss., University of London, 1940

the economic situation of Argentine provinces in much more detail than the British press, simply because a considerable amount of these loans were issued in Paris. Other cases followed. The German *Handelszeitung* began its activity in 1888, and it specialized on Argentina's economic and political situation. German investment in that country had begun already in 1886, when the first bonds began to appear in Berlin and with them an increasing need for accurate information.

The banks

Financial Intermediaries had different sources of information, depending on their market power and on incentives to gather first hand information. We intend to illustrate this point by describing three different cases which were, directly or indirectly, involved in Argentina's affairs. As we will demonstrate, Baring was in a particular position as its relationship with Argentina was characterized by historical links (financial literature calls this "Relationship Banking")⁴⁰ and thus, its level of information was high, as opposed to any short term participant.

Crédit Lyonnais (CL). Flandreau (1998) describes the formation during the 1870s and 1880s of a bank which became a leader in the European financial markets.⁴¹ After the foundation of the "Department of Financial Studies", CL aimed at providing its clients with the necessary data for investment decisions. On the one hand, CL gathered information from the financial press in France and outside the country, as well as from the official publications of the analyzed countries. On the other, it also made use of foreign correspondents, going beyond official reports and publications.

⁴⁰ This concept is further developed for the 19th century financial history literature in Marc Flandreau, "Crises and Punishment: Moral Hazard and the Pre-1914 International Financial Architecture, *CEPR Discussion Paper Series*, No. 3742 (2003).

⁴¹ Marc Flandreau, "Cavaet Emptor: Coping with the sovereign risk without the multilaterals, *CEPR Discussion Paper Series*, No. 2004 (1998).

Sometimes, the bank engaged two different agents for the same country being them unaware, in order to have the best and most objective information. Besides, the department was particularly interested in making an intelligent use of the public available information.

Even though the apogee of CL's unit of economic intelligence was precisely after 1890, we could obtain some information about Argentina gathered during the 1880s. For instance, the series constructed in 1887 showed data from the *Memorias*: public finance, trade, revenues from trade taxes, exports taxes and debt service. Since 1892 (just after the Baring crisis) we find different series elaborated from the modifications made by the Service d'Etudes Financières⁴². For instance, while present studies debate the amount paid by Argentina during the 1880s, CL elaborated its own series from the issue conditions of the loans in a very precise manner. As regards to government deficits, CL presented historical series in net terms. After having analyzed the official accounts, the bank made some corrections. In general terms, CL took into account what it called "*comptes d'ordre*", which measured the net revenues from certain taxes and the costs from certain expenses. Thus, the series indicated the results for Argentina as a country with persistent deficits.⁴³

The case of a short-term competitor: Banque de Paris et des Pays-Bas. This bank may be representative of the new banks which entered the Argentinean market in the 1880s. For the years 1879 and 1881, we found several reports in the archives which aimed

⁴² Similar series may have been elaborated already in the 1880s, but we have not been able to find them yet.

⁴³ These figures can be found in Crédit Lyonnais' Historical Archives: Boxes DEEF 73404-8 and DEEF 73415.

at informing the director of the bank about the economic situation of Argentina and about the loans contracted by the country⁴⁴. The reports pointed out the characteristics of the loans, the banks in charge of the issues, the amount and the price of the bonds already in the market, the objective of the loans and the guarantees of each of them. The bank made use of commercial houses in Buenos Aires in order to know the state of the market and to negotiate potential new loans for the government. During the 1880s, Bemberg was the intermediary between Argentina's government and the Bank (formally, it was the representative of Paribas in Buenos Aires). It sent telegraphic messages (when a loan was negotiated) or more detailed letters about the financial movements and the state of affairs in the country.

This bank counted only on the necessary information in order to decide whether to participate or not in the issue of a loan, in a syndicate or in short term loans. It held correspondence with other banks and with Bemberg, a merchant house that operated in Buenos Aires and who acted as the representative of Paribas in Argentina. The letters concerned only each loan, advance, or the conditions of each new issue. At the same time, Bemberg was in charge of informing the bank about the movements of any potential competitor for each loan. When after 1885 Paribas was restricted only to deal with provincial loans, its information about Argentina concerned only the provinces with which the bank had business.

We do suspect, thus, that the information of these banks was somewhat imperfect at best or inexistent, at worst. For instance, in 1888 the *Banque de Paris et Pays Bas*

⁴⁴ Paribas Archives, 102.955, Box 404.

took a loan firm, within a syndicate, for the province of Cordoba. Under quite favourable conditions for the provincial government, the loan included a series of guarantees like the shares of the Provincial Bank of Cordoba, the dividends of the Mortgage Bank of the province (which was to be created with the funds from the loan), and the revenues of the province. But, as we could verify by the correspondence held between the banks that participated in the syndicate, the banks were not really aware of the solidness of the guarantees. In a letter addressed to the governor of the province, dated 10th April 1890, the banks requested information about the revenues of the province and the real amount of the guarantees affected to the loan. The province did default on its debts eight months later.

The leader: Baring in Argentina. The history of the relationship between Baring and Argentina was already described by historians such as Ferns (1960), Ziegler (1988) and Jones (1972).⁴⁵ Primary sources used in these works include the Baring Archives, the Archives of the Bank of England, and to a lesser extent, the *Memorias de Hacienda*, all of them reviewed by ourselves. They all show that there existed a particular relationship between Baring and Argentina since the country took its first loan in 1824. What appears less evident is the general perception that Baring were the bankers of Argentina. While the position of Ferns is rather firm on the fact that Baring never considered themselves the bankers of Argentina, Ziegler argues the opposite.

⁴⁵ Charles A. Jones, "European Bankers and Argentine, 1880 –1890", *Working Papers Business Imperialism Series*, No.3 (1972); Philip Ziegler, *The Sixth great power: Barings, 1762-1929*, (London, 1988).

Ferns gives several arguments to show the reason for the false belief in Baring as Argentina's bankers, beginning with the own borrowing history of the country. Baring was the first *"highly regarded firm of merchant bankers to float a loan of £1 million on behalf of the new-born United Provinces of the Rio de la Plata in 1824"*⁴⁶. The general attitude in the new independent countries of South America was that Baring participated, and it was justified, following Ferns, by the fact that

*"They [Barings] had an uneasy suspicion that they were missing the bus. They felt this particularly about the River Plate, to which area the British exported more than £1 million worth of goods in 1824 alone"*⁴⁷

The entrance of a new borrower into the financial markets in Europe could not be automatic. They had to show the profitability of their projects and the seriousness of their economic policies. However, information remained limited. That is the way the market understood it, and also the Argentinean government. For instance, when the loan of 1822 for the construction of the new port of Buenos Aires was approved by Congress in Argentina, Ziegler wrote:

*"The Minister of Finance in Buenos Aires had urged them (various Argentine associates) to involve Baring in the transaction if they possibly could, since nothing would help more to establish the country's credit"*⁴⁸

⁴⁶ Ferns, *Britain and Argentina*, p.132

⁴⁷ Ibid.

⁴⁸ Ziegler, *The Sixth Great Power*, p. 101.

However, as in the case of most Latin American countries, Argentina defaulted on its debt in 1828. Unlike other banks involved in Argentina's affairs, Baring was the only one to defend the interests of investors, succeeding eventually with an agreement in 1857. Baring was interested in this agreement not because it intended to benefit Argentina or even affected investors; it acted on its own interest, defending its reputation. Ziegler argues that in order to continue to be trusted, Baring had to guarantee investors' revenues. In fact, after 1857, eight years had to pass before Baring decided to issue a new loan on behalf of Argentina. Even this time, this minor issue (£0,55 million) was not a success and Baring had to buy £0,2 millions. Before the 1880s, Baring participated in two additional loans, even though two other British banks entered the market of Argentina's loans (Morgan and Murrieta).

The main activity of Baring in Argentina was trade through the commercial houses established in Argentina. In 1856 it was Zimmerman, Franzier and Co., and later, in 1873, S.G. Hale & Co. These activities provided Baring with some information about the state of affairs in Argentina. However, Baring did not consider this enough for taking the decision of issuing a new loan in London on behalf of the Argentinean government. In fact, there existed an important demand from the investors in London of the borrowings of Argentina. Ziegler agrees with Fenns about the ignorance of British investors and about the position of Baring as a provider with good criteria.

With the crisis of 1873, economic difficulties brought S.B. Hale and & Co. to almost bankruptcy. In 1876, Baring sent one of its own employees, Nicholas

Bower, in order to provide them with the information about the investments where Baring had special interest (loans, short-term advances) and to work together with Hale. Looking into the Archives in detail, most information that Baring had about Argentina in the 1870s and 1880s comes from the correspondence with Bower and some telegraphic messages when some important events took place. The reports of Bower included a number of matters about the country: trade, prices, immigration, financial position of the country, banks, natural resources, assets of the country which could be sold, etc. Bower also established an almost personal relationship with Argentina's government. We have found written reports which contained exactly the same statistics as those published three months later in the *Memorias*, with additional comments from his own point of view and conversations with Argentinean politicians.

During the period 1877-1883, a constant flow of information was available to Baring, having in Bower a reliable agent providing the bank with detailed reports on the economic situation, the state of the investments and the opportunities for new business. Financial markets seemed to have closely followed this relationship because some reports and news reached the press through Baring's intermediary (acting as a kind of financial press agent). The information that Baring made public increased with uncertainty or when something extraordinary took place in Argentina.

However, this situation changed in 1883 due to several reasons. On the one hand, it seems to us, it was competition. With the entry of new banks for the issuing of new loans in the financial markets of Europe, the relationship between Baring and

Argentina deteriorated⁴⁹. Jones wrote that “*Bower was at great pains to point out to the National Finance Minister the serious loss which the government had sustained through dealing with the French*”⁵⁰. In fact, Ferns argues that Baring was willing to formalize its relationship with Argentina, blocking the entry to any new competitor. In 1880, Baring insisted on an “open line of credit secured by saleable assets” and that the government agreed to deal only with Baring for the issue of new loans. Both requests were declined by Argentina. On the other hand, the relationship between Bower and Baring changed too. It deteriorated for several reasons since 1883. Baring decided to close its agency at Buenos Aires and continued to operate only through Hale & Co. Bower continued to work with Baring but in a rather different way. In fact, the reports since 1883 are much less detailed and frequent than during the period 1877-1883.

In order to conclude this section, we may summarize the functioning of information flows in the late 19th century capital markets. Grieser wrote that the banks were also a source of information for the ordinary investor. This is also supported by Ferns for Argentina. We have reproduced the information model in figure 4. News to an ordinary investor arrived from Argentina with a time lag. Besides, there existed information in the hands of Baring, which it decided to make publicly available or not⁵¹. So, Baring acted also as a press agency with no rivalry for certain delicate issues. As we have shown, Barings’ own information

⁴⁹ Recall from financial theory literature the fact that long term relationships between a bank and a firm may be beneficial for both agents. A firm may have an open credit line in difficult periods and the bank may assure positive profits in the long term. For a survey on Relationship Banking see Arnoud W.A. Boot, “Relationship Banking: What do we know?”, *Journal of Financial Intermediation*, Vol. 9, No.1 (2000), pp.7-25.

⁵⁰ Jones, “European Bankers”, p.5

⁵¹ Prospectus on the 1888 bond issues contained very ambiguous information on public finance. Their counterparts in Germany showed some more details, but they were limited to the budgets published for the coming years.

deteriorated precisely when it was most needed. Finally, the only signal transmitted to investors was the constant involvement in Argentina's new bond issues, what could have been regarded as "good news".

V. The outcome of information asymmetries: spreads vs. fees

Information asymmetries also determine the distribution of borrowing costs: while yield premia may stay low, other costs may increase. In particular, investment banks charge their clients (the borrowers) with fees on underwriting, placement, and other related services, and recommend on market-friendly economic policies in order to attract investors, and inform on market conditions. There exists abundant literature on the determinants in underwriting fees, underpricing⁵² and generally on all the "money left on the table". On the one hand, very much like investors' risk perceptions, the literature on underwriting agrees that underwriting fees depend on the bonds' credit risk and other factors such as the maturity of the bonds or issue size, market structure, etc.⁵³ On the other hand, little consensus has been reached on what determines the nature of underpricing, and the main conflicting positions still lack robust evidence. However, it is widely recognized that underpricing helps financial intermediaries to attract potential investors by guaranteeing positive profits. Riskier issues would require more underpricing in order to attract potential investors. In none of these studies, however, have these variables been linked with financial crises. Our aim is to approach this problematic from an Economic History

⁵² Underpricing exists when there is a considerable difference between the issue price and the same day (week, month) closing price in the secondary market. On a survey on Initial Public Offering underpricing see Anders Ljungquist, "IPO Underpricing: A Survey", in Espen Eckbo (ed.), (North Holland 2007) *Handbook in Corporate Finance: Empirical Corporate Finance*, pp. 375-418.

⁵³ A pioneer work on this subject is Richard R. West, "Determinants of underwriters spreads on tax-exempt bond issues", *Journal of Financial and Quantitative analysis*, Vol.2, No.3 (1967), pp.241-63. See also Arie Melnik and Doron Nissim, "Debt issue costs and issue characteristics in the Eurobond market", *ICER Working Papers* 09-2003.

perspective, as we thus have all the elements necessary to understand a potential relationship between primary markets structure and the Baring crisis.

It is possible that “secondary market” variables capture some hidden noises which we intend to remove. The most important may be the noise coming from underwriting banks’ behaviour. In a context of high competition, banks offered complete firm taking for Argentina’s bonds.⁵⁴ If we look at the London sovereign bond issues of the 1880s, other than a non-issued loan for Uruguay in 1890 and Chile’s two latest bond issues, European banks did not offer to take firm the loans of Latin American countries. It is thus puzzling that Argentina succeeded in getting more favourable terms from the banks (See Flores, 2007). As we have shown, the macroeconomic situation of Argentina did not coincide with this anomalous risky position taken by banks. In fact, the underwriting fees charged to Argentina happened to be extraordinarily high, even though spreads of Argentina’s long-term sovereign bonds and U.K. consols remained stable. To clarify this, Chile’s two loans, 4,5% 1886 and 4,5% 1887 paid 2,5 and 1,5% underwriting fees issued by the Rothschilds, the dominant bank for the country in the 1880s. This is consistent with the low spreads shown by Chilean bonds on secondary markets. In more general terms, this is shown in Figure 5. We present the relationship between initial spreads and underwriting fees (for those loans which were launched through firm taking by the banks). Although Argentina’s spreads (between 1884 and 1889) were slightly higher than Chilean ones (between 1—1 ½ %), the differences in underwriting fees

⁵⁴ By underwriting we mean firm taking, as banks bought the bonds from the government at a purchase price and later placed them in the market at an issue price (thereby taking the complete risk from a possible Public Offering failure). The difference between purchase and issue price constitutes the underwriting fee. Recall that, under this system, banks assume the risk if a bond issue fails, as it was the case for Baring’s failed issue of the Water Supply Company in 1890. In other issue systems banks only place the bonds into the market acting merely as intermediaries.

were huge (for which Chile had to pay 2 ½-3 ½%). Even when comparing this situation with 1882, where Argentina's spreads were higher, the fees paid by Argentina's Government were comparatively low. If Argentina was supposed to have such a good credit in the European financial centres, why did the country accept to pay increasing fees? And why did Banks, if competition was so fierce, continue to demand them? In fact, however, total amounts left on the table were decreasing. Figure 6 shows these trends for Brazil, Chile, and Argentina at different periods (each line represents a country and a time period). We show the total differences between secondary market prices of similar bonds and the purchase price (for loans taken firm by banks) or minimum guaranteed price (for the other cases) at the date of contract for Argentina (before and after 1885), Brazil and Chile.⁵⁵ This is a measure of the willingness of governments to leave money on the table. Decreasing "total underpricing" reflects the fact that every country was improving the terms of borrowing, including Argentina. Chile was the only country where total underpricing was negative or inexistent.

Figure 6 also shows an additional feature of capital markets in the 1880s. Banks had an additional advantage since negotiations and implicit agreements were conducted sometimes in a "secret manner".⁵⁶ Since 1889, Argentina had negotiated with the banks an important loan in order to assure the debt service of the country⁵⁷--in Figure 6, the "Baring Contract of 1890" cross--. No bank was willing to participate

⁵⁵ In other words, a Government accepts for its bonds the purchase price (paid by the banks who issue the bonds to the market) p_a , while the market's worth of similar bonds is p_s , assuming that $p_s > p_a$. The difference between $p_s - p_a$ is the money left on the table, an amount necessary to attract investors and avoid the risk of a failure of the new bonds issue. The debt contracts were signed between the banks and the Governments to specify all the terms of the new loan.

⁵⁶ There exists an interesting exchange of telegraphic messages between Hale and Baring about the negotiations of the 1890 loan and the need to keep them secret. Baring archives, Hc4.1.71.

⁵⁷ Information on the 1890 loan can be found in box Hc4 1.113 of the Baring Archives.

in the loan and it was Baring alone (suggesting that banks were perfectly aware of the economic conditions of Argentina), which signed a contract with the government to issue a £10 million loan. Severe conditions were imposed regarding the cessation of paper notes issues, lowering the prime on gold, giving up any new borrowing and collecting half of the duties in gold pesos. We observe that the willingness of Argentina to leave money on the table was enormous, more than 15%. If there were no underpricing, we would assume a 15% underwriting fee (since Baring was willing to take firm one third of the loan), while similar Argentina's bonds were quoting at 93 (and thus a spread of 2,7) at the date of the contract—the purchase price for the bonds offered by Baring was 78--.⁵⁸ However, the agreement could not be ratified due to political unrest in Buenos Aires. Although the press barely mentioned “rumors” about the loan with Baring, the terms of the agreement were not known until November, as Baring needed a bail out from the Bank of England. Obviously, this issue never took place.

V. Conclusion

We can only speculate whether Baring believed that the situation could be saved accepting to underwrite the last bail out loan of 1890, and obliging Argentina to redress its economic situation. This is not far from Ferns' own conclusion that suggested that the Baring crisis was due to a misperception from investment bankers even though, following Ferns, Baring agents were alert, competent and cunning in their observations:

⁵⁸ We have no information on the planned issue price of this loan.

*“...but we cannot escape the conclusion from the behavior of the investment bankers that their understanding and judgment deteriorated in the 1880s and their responsibility and ignorance were factors in the Baring crisis of 1890-1891”*⁵⁹

However, this could only take place because information asymmetries were huge in the 1880s and so, they can also be held responsible for the Baring crisis. In fact, the information model prevailing at the period began to change since the early 1890s. Capital exports had a “sudden stop” during the 1890s, and the information structure began to change. The reports of the CFB began to be more detailed, other banks followed Credit Lyonnais’ unit of analysis and the financial press experienced a new boom. In the case of Argentina, after being excluded from capital markets during some years, Baring returned to business as the only merchant bank for all issues, recovering its quasi-monopolist position. Argentina did not experience additional crises before WWI. Nonetheless, even in this new context of increased information availability (and thus higher “transparency”) financial crises did continue to occur throughout the world.

Finally, it seems that markets could be aware of problems in Argentina even though they had less information than banks. The attitude of financial intermediaries was, however, to send confidence signals by issuing new bonds as demand existed. This behaviour was pushed by short term gains. Baring, on the other hand, relied upon a long term relationship and had different incentives from those of the other competing banks. It has still to be demonstrated if this behaviour was a general pattern in 19th century finance and compare it with contemporaneous investment banking.

⁵⁹ Ferns, *Britain and Argentina*, p.330.

Figures and Tables

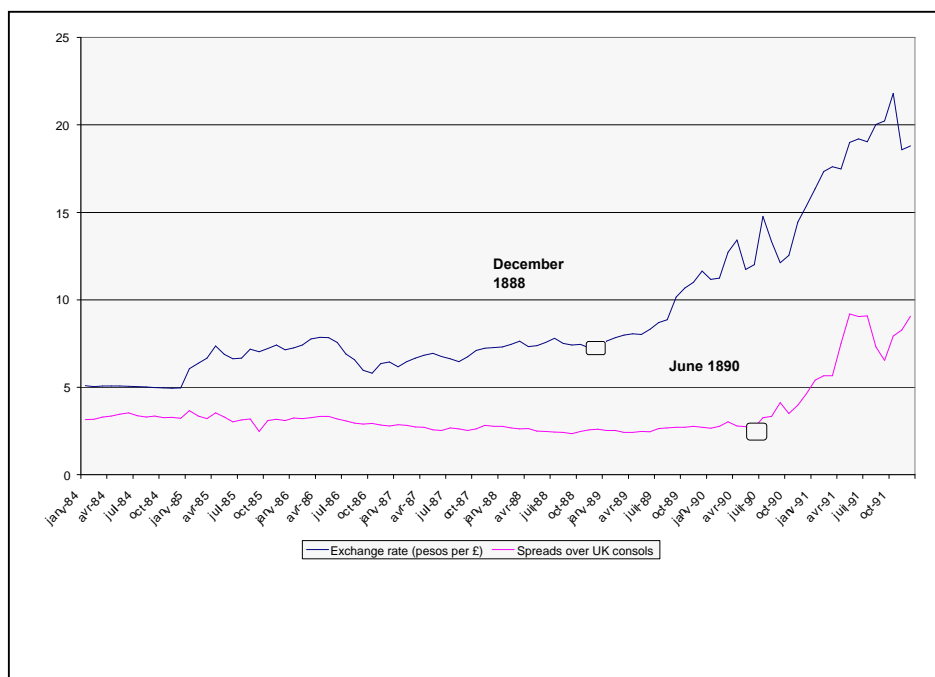


Figure 1: Yields and Exchange rate of Argentina prior to and during the Baring crisis.

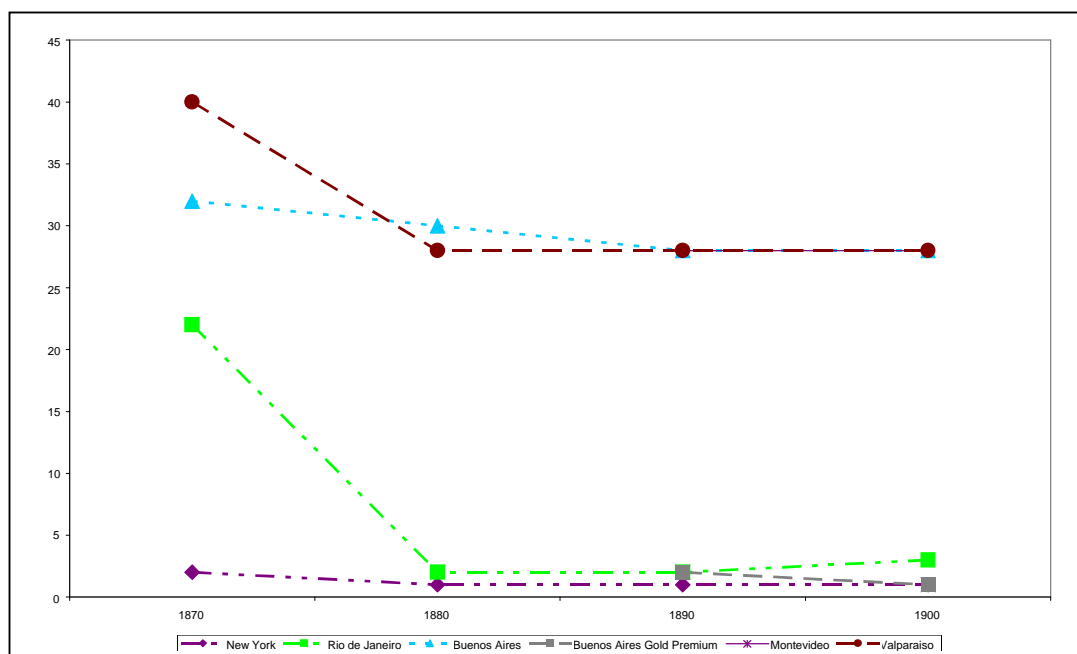


Figure 2: Reported Exchange rates in “The Economist”. Lags in days between reported date and date of journal’s issue.

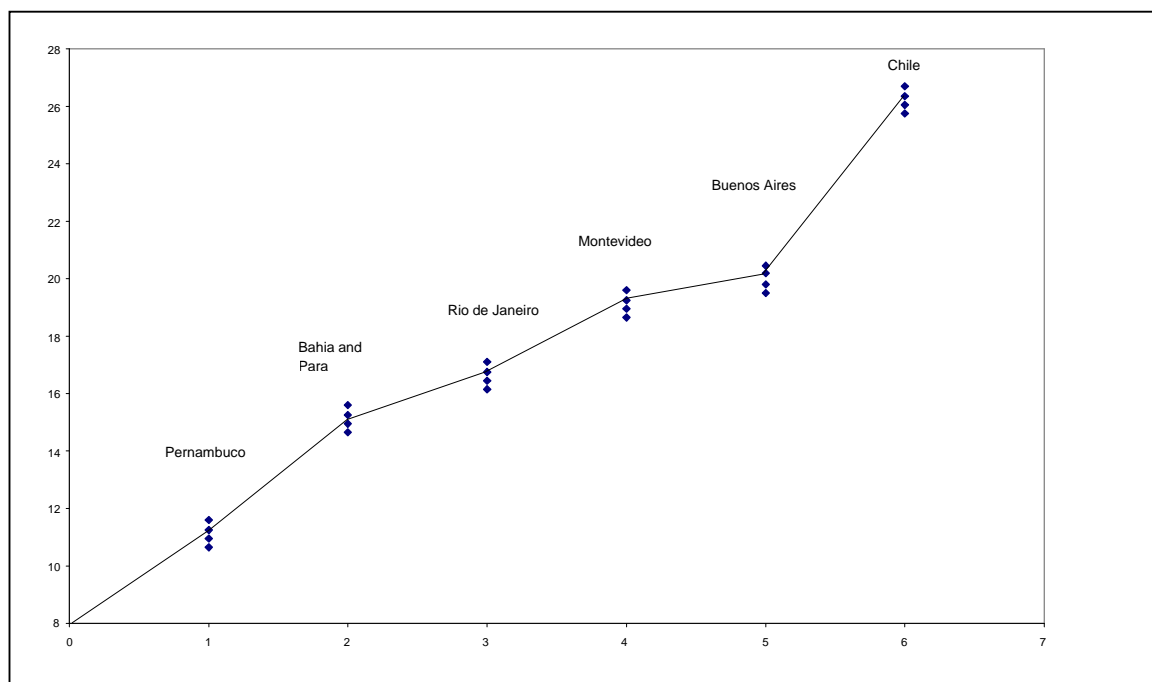


Figure 3: Prices in French francs for a telegraph between France and South America. Each dot represents a different route. Source: Paul A. Laurencin-Chapelle, *Le Télégraphe*, (Paris, 1877).

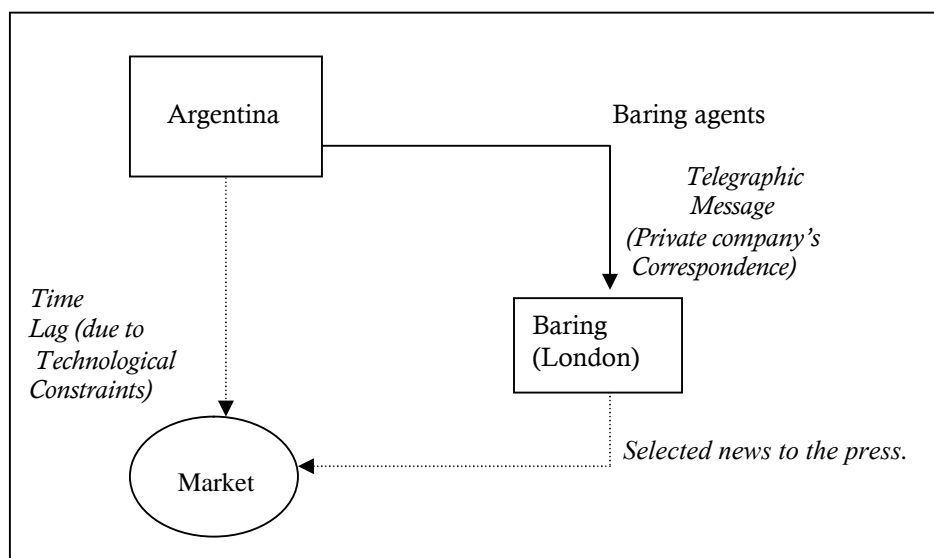


Figure 4. Information available to the market

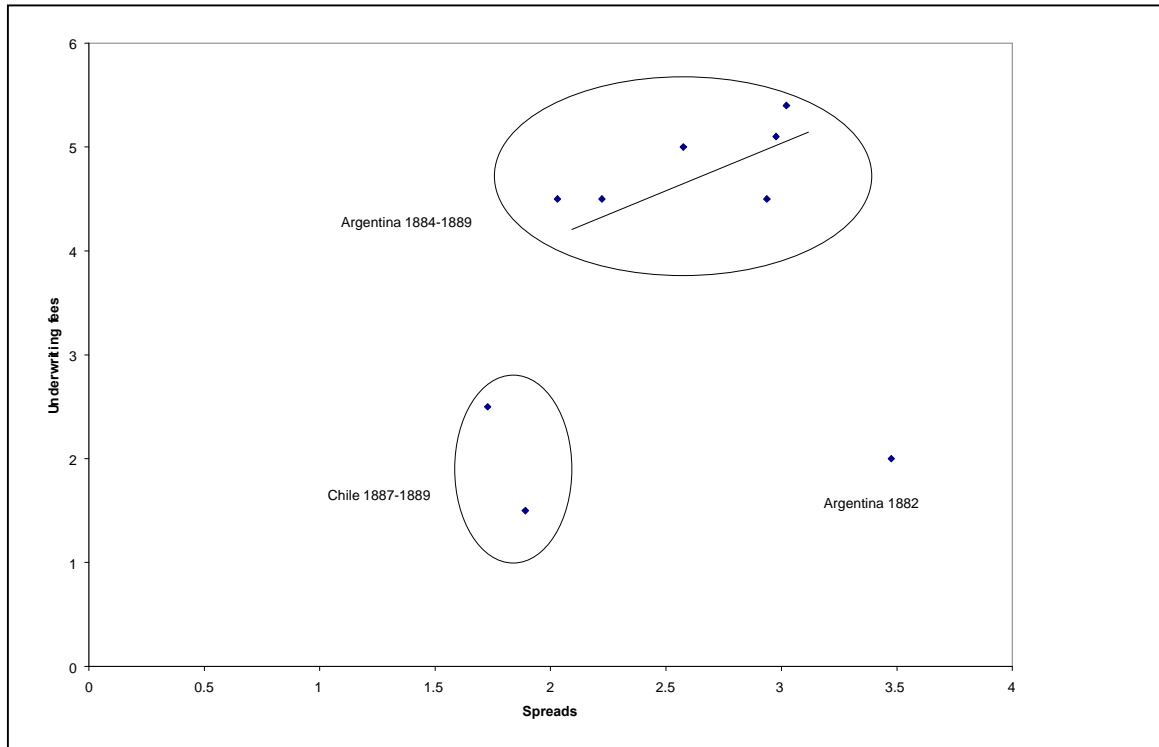


Figure 5. Underwriting fees and spreads

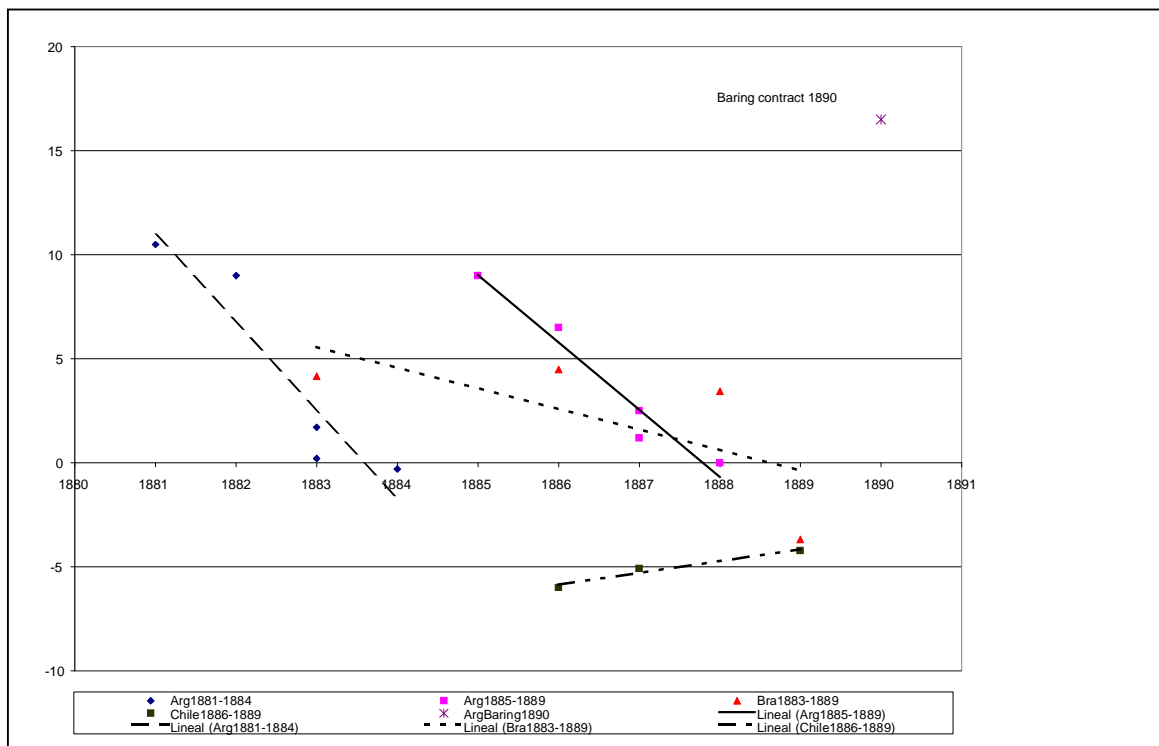


Figure 6. Hypothetical underpricing, defined as the difference between secondary market prices and purchase price (paid by the banks) of new bonds at date of contract.

Variable	Period	Data	Source of Data
Real GDP average growth	1885-1890	6,8%	Della Paolera (1988).
M1 average annual growth	1886-1890	27%	Della Paolera (1988).
Cumulative Depreciation of Paper Peso	1885-1890	89.5%	Agote (1889)
Inflation in year:	1889, 1890	18%, 33%	Della Paolera (1988)
Public Deficit as a percentage of Public Revenue	1886, 1889	23%, 41%	Memorias de Hacienda
Debt service as a percentage of Public Revenue	1885, 1889	30%, 62%	Memorias de Hacienda

Table 1: Some main macroeconomic indicators, different sources (see text). Pedro

Agote, *Rapport du président du Crédit Public National* (Buenos Aires, 1889).